

IN THE CLAIMS

1. (Currently Amended) Hollow-chamber profile made of metal, especially for heat exchangers, consisting of an extruded base profile (10) with two parallel wide sides (16, 17) and two narrow sides (18, 19), where at least one channel (11) extends in the longitudinal direction of the base profile (10) through the interior space (23) in the base profile (10), ~~characterized in that~~ wherein the narrow sides (18, 19) are shaped in the direction perpendicular to the longitudinal dimension of the base profile (10), where left-oriented profilings (21) transverse to the longitudinal dimension and right-oriented profilings (22) transverse to the longitudinal dimension alternate with each other along the two narrow sides (18, 19), and where the width (B) of the base profile (10) is the same over the entire length of the base profile (10).
2. (Currently Amended) Hollow-chamber profile according to Claim 1, ~~characterized in that~~ wherein webs (13), which extend from wide side (16) to wide side (17) and form several channels (11), are located in the interior space (23) of the base profile (10), and in that these webs(13) have profilings (21, 22) perpendicular to

the longitudinal dimension of the base profile (10), where the distance (A) between two adjacent webs (13), the distance (C) between the narrow side (18) and the first web (13'), and the distance (D) between the narrow side (19) and the last web (13'') are the same over the entire length of the base profile (10).

3. (Currently Amended) Hollow-chamber profile according to ~~Claim 1 or Claim 2, characterized in that~~ Claim 1, wherein the profilings (21, 22) of the narrow sides (18, 19) and of the webs (13) form a wave-like pattern extending down the length of the base profile (10), such that the base profile (10) has the same free flow cross section at all points along its length.
4. (Currently Amended) Hollow-chamber profile according to Claim 3, ~~characterized in that~~ wherein the wave-like patterns formed by the narrow sides (18, 19) and the webs (13) have the same wavelength over the entire length of the base profile (10).

5. (Currently Amended) Hollow-chamber profile of metal, especially for heat exchangers, consisting of an extruded base profile (10) in the form of a round tube or a coaxial tube, where at least one channel (11) extends in the longitudinal direction of the base profile (10) through the interior space (23) in the base profile (10), ~~characterized in that~~ wherein opposite sides of the base profile (10) are shaped in the direction perpendicular to the longitudinal dimension of the base profile (10), where left-oriented profilings (21) transverse to the longitudinal dimension and right-oriented profilings (22) transverse to the longitudinal dimension alternate with each other along the sides, and where the width (B) of the base profile (10) is the same at all points along the length of the base profile (10).

6. (Currently Amended) Hollow-chamber profile according to ~~one of Claims 1-5, characterized in that~~ Claim 1, wherein the base profile (10) is manufactured of aluminum or an aluminum alloy.

7. (Currently Amended) Hollow-chamber profile according to ~~one of Claims 1-6, characterized in that~~ Claim 1, wherein it is used as a cooler for gas or liquid streams, especially as a gas cooler or as a charge cooler for motor vehicles.
8. (Currently Amended) Process for the production of a hollow-chamber profile made of metal, especially for a heat exchanger,
- where a hollow profile strand (20) is produced by extrusion in the form of a round tube or a coaxial tube, or a flat profiled strand (20) is produced with two parallel wide sides (16, 17) and curved or flat narrow sides (18, 19), at least one channel (11) extending through the interior space (23) of the base profile (10);
 - where this hollow profile strand (20) is shaped; and
 - where the profile strand is then cut to obtain the base profile (10) of the desired length,
~~characterized in that~~ wherein the hot, hollow profile strand (20) emerging from the shaping zone of the extrusion die (33) is caused to oscillate in a defined manner and/or is shaped by an oscillating shaping tool (30).

9. (Currently Amended) Process according to Claim 8, ~~characterized in that~~ wherein a hollow profile strand of aluminum or an aluminum alloy is extruded.
10. (Currently Amended) Process according to ~~Claim 8 or Claim 9,~~ ~~characterized in that~~ Claim 8, wherein a shaping tool (30), which oscillates in a direction perpendicular to the exit direction (36) of the profile strand (20), produces profilings (21, 22) of the same type simultaneously on the narrow sides (18, 19) and on webs (13), if present, of the hot hollow profile strand (20) as soon as it emerges from the shaping zone.
11. (Currently Amended) Process according to Claim 10, ~~characterized in that~~ wherein the narrow sides (18, 19) and the webs (13) are given similar sets of corrugations in the longitudinal direction of the base profile (10).
12. (Currently Amended) Process according to ~~Claim 8 or Claim 9,~~ ~~characterized in that~~ Claim 8, wherein the shaping tool (30), which moves in at least two planes of oscillation, produces circular corrugations of the profile wall (12) in the hot hollow profile strand (20) as soon as it emerges from the shaping zone.

13. (Currently Amended) Process according to ~~one of Claims 8-11,~~
~~characterized in that,~~ Claim 8, wherein, to obtain corrugations
with the desired wavelength (l), the oscillation frequency (f)
of the shaping tool (30) is adapted to the exit speed (v) of the
strand.
14. (Currently Amended) Process according to ~~one of Claims 8-13,~~
~~characterized in that~~ Claim 8, wherein the profile strand is
produced at extrusion speeds (v) of 15-200 m/minute, and
preferably of 60-150 m/minute.
15. (Currently Amended) Process according to ~~one of Claims 8-14,~~
~~characterized in that~~ Claim 8, wherein the wavelengths of the
corrugations of the profile strand (20) are on the order of 1-
100 mm.
16. (Currently Amended) Process according to ~~one of Claims 1-15,~~
~~characterized in that~~ Claim 1, wherein the shaping tool (30)
acts on the hot, hollow profile strand (20) as soon as it
emerges from the extrusion die (33), so that the deflection
forces which occur during the oscillating movement of the
shaping tool act all the way back into the extrusion die (33).

17. (Currently Amended) Process according to Claim 16, ~~characterized in that~~ wherein the shaping tool (30) is located in a recess in the cross-brace of the extruder.
18. (Currently Amended) Process according to ~~one of Claims 8-15, characterized in that,~~ Claim 8, wherein as soon as the hollow profile strand (20) emerges from the extruder, it is gripped by a guide (37) located a certain distance away from the extrusion die (33) and conducted to a shaping tool (30), during which the temperature of the hollow profile strand (20) decreases from the temperature at which it left the extrusion die (33) to a shaping temperature inside the shaping tool (30) of at least 250°C, and preferably of greater than 400°C.
19. (Currently Amended) Process according to ~~one of Claims 8-15, characterized in that,~~ Claim 8, wherein, as soon as the hollow profile strand (20) emerges from the extruder, it is gripped by a guide (37) located a certain distance away from the extrusion die (33) and is heated to a shaping temperature of at least 250°C, and preferably of greater than 400°C, before it is directed to a shaping tool (30).

20. (Currently Amended) Process according to ~~one of Claims 8-19,~~
~~characterized in that~~ Claim 8, wherein the oscillating movement
of the shaping tool (30) is produced by electromagnetic forces.
21. (Currently Amended) Process according to ~~one of Claims 8-19,~~
~~characterized in that~~ Claim 8, wherein the shaping tool (30) is
subjected cyclically to the force of a fluid medium to produce
the shaping of the hollow profile strand (20).
22. (Currently Amended) Process according to Claim 8, ~~characterized~~
~~in that~~ wherein the extrusion die (33) itself acts as an
oscillating shaping tool (30).